



## Human Adipocyte Conditioned Media Extract

Product	ADSC-CM
INCI name	Human Adipocyte Conditioned Media Extract
Korean name	인체지방세포배양액추출물
Effects	<ol style="list-style-type: none"> <li>1. Tissue regeneration [neogenesis]</li> <li>2. The biosynthesis promotion of ECM(Extra Cellular Matrix) proteins such as collagen and hyaluronic acid(HA) etc.</li> <li>3. Nonkerationcyte [corneous cell] and fibroblast proliferation</li> <li>4. Skin whitening</li> <li>5. Hair tonic and hair restoration</li> </ol>

### Human Adipocyte Conditioned Media Extract ADSC-CM

ADSC-CM is human fat tissue-derived stem cell culture and is rich in growth factors such as EGF, basic FGF, and TGF- $\beta$ <sub>1</sub> and bioactive substances such as various cytokines, enzymes, and ECM structural protein etc. Thus, it stimulates aging, damaged and activity-reduced cells and helps activate cells.

It has clinically been proved that the functions of ADSC-CM that stimulates biopolymers such as collagen, hyaluronic acid(HA), is effective against wrinkles and prevents wrinkles by multiplying dermis and epidermal cells and helps skin whitening by inhibiting melanin. The effects such as cell restoration[regeneration], hair regeneration[growth], and hair restoration etc. have been also reported.

ADSC-CM(Adipose Derived Stem Cell-Conditioned Medium) is being isolated, cultured, and produced in accordance with strict guideline of the KFDA(Korea's Ministry of Food and Drug Safety).

## Evidence Report

### © *In vitro* tests

**EFFICACY TEST 1 : Wound healing & tissue regenerative effect**

**EFFICACY TEST 2 : Bio-synthesis of collagen and hyaluronic acid**

**EFFICACY TEST 3 : Proliferative effect on dermal fibroblast**

**EFFICACY TEST 4 : Strengthen effect on skin barrier**

**EFFICACY TEST 5 : Whitening effect (Melanin inhibition)**

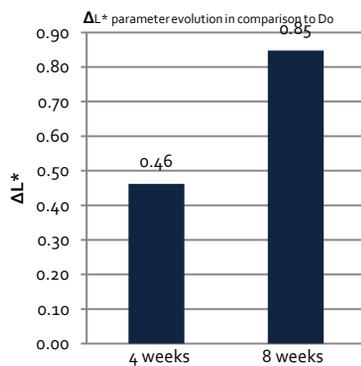
**EFFICACY TEST 6 : Whitening effect (Melanin and tyrosinase activity inhibition)**

**EFFICACY TEST 7 : Whitening effect (Cell Morphology)**

### © Clinical test

**EFFICACY TEST 8 : Clinical test (Whitening)**

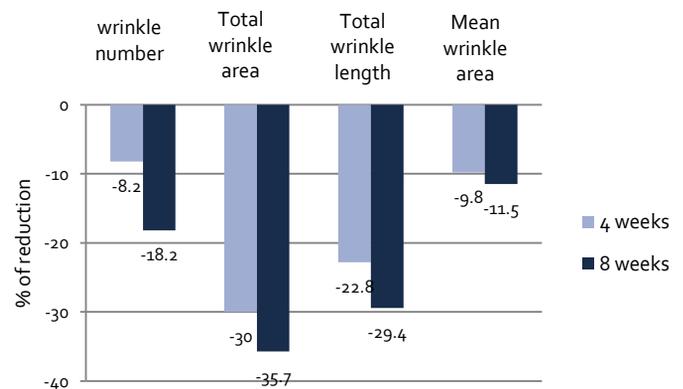
**EFFICACY TEST 9 : Clinical test (Anti-wrinkle)**



•  $\Delta L^*$  = Luminosity (Lightness)

L 0 is black, L 100 is white

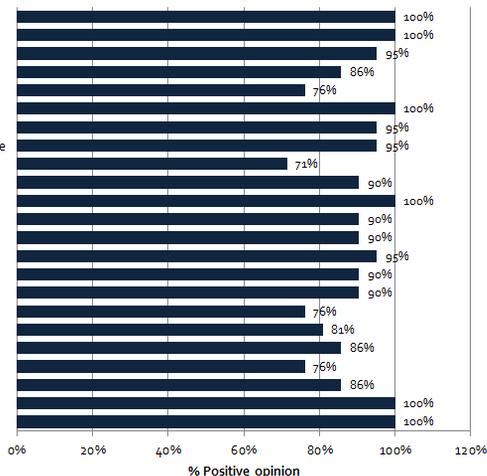
•  $ITA^\circ = \text{Arc tan} ((L^* - 50)/b^*) 180\pi$



In a clinical study with 20 Asian healthy female volunteers, 10% formula containing ADSC-CM had been applied twice daily during 8 weeks on the face area (Spincontrol Asia, Bangkok).

**EFFICACY TEST 10 : Clinical test (Self assessment)**

My skin is moisturized  
 My skin is softer  
 My skin is more supple  
 My skin is smoother  
 My skin restored its elasticity  
 My skin is like lifted  
 Wrinkles and fine lines on the face are less visible  
 Wrinkles and fine lines on the crow's feet area are less visible  
 Nasolabial fold is less visible  
 Forehead wrinkles are less visible  
 My skin is firm  
 My skin seems younger and healthier  
 My skin around the eye contour is smoother  
 My skin is more even  
 My facial pores are tightened  
 My skin tone is more even  
 My skin is brighter  
 My eye circle (dark circle) is less visible  
 My hyperpigmented spots are brighter  
 My dark scars are faded/less visible  
 Skin redness is less visible  
 My skin is soothed and calm  
 Overall, are you satisfied with the tested product?



Volunteers agree that ADSC-CM makes improvement the skin.

- ✓ **100% positive opinion**
  - Skin is moisturized
  - Skin is softer
  - Skin is like lifted
  - Skin is firm
  - Skin is soothed and calm
  - Satisfied with the product
- ✓ **95% positive opinion**
  - Skin is more supple
  - Wrinkles are less visible
  - Skin is more even